Group Art/Unit: 1644

A, which may or may not be present, comprises a nucleotide sequence of at least one first exon of a B7-1 or B7-2 T cell costimulatory molecule gene, wherein the at least one first exon encodes a B7-1 or B7-2 signal peptide domain,

B comprises a nucleotide sequence of at least one second exon of a B7-1 or B7-2 T cell costimulatory molecule gene, wherein the at least one second exon encodes a B7-1 or B7-2 immunoglobulin variable region-like domain,

C comprises a nucleotide sequence of at least one third exon of a B7-1 or B7-2 T cell costimulatory molecule gene, where the at least one third exon encodes a B7-1 or B7-2 immunoglobulin constant region-like domain.

D comprises a nucleotide sequence of at least one fourth exon of a B7-1 or B7-2 T cell costimulatory molecule gene, where the at least one fourth exon encodes a B7-1 or B7-2 transmembrane domain, and

E comprises a nucleotide sequence of at least one fifth exon of a B7-1 or B7-2 T cell costimulatory molecule gene, wherein the at least one fifth exon encodes a B7-1 or B7-2 cytoplasmic domain,

with the proviso that E is not the nucleic acid-sequence shown in SEQ ID NO: 25, E is not the nucleic acid sequence shown in SEQ ID NO: 27, E is not the nucleic acid sequence shown in SEQ ID NO: 31, wherein said nucleic acid molecule comprises a nucleotide sequence that hybridizes to the complement of a nucleotide sequence of SEQ ID NO: 4 under conditions of 5.0 x sodium chloride/sodium citrate (SSC) at about 55 °C and 5% SDS, followed by a wash in 2.0 x SSC at about 55 °C.

- 79. (NEW) The isolated nucleic acid molecule of claim 78, wherein said nucleic acid molecule comprises a nucleotide sequence which hybridizes to the complement of the nucleotide sequence of SEQ ID NO: 1 under conditions of 5.0 x sodium chloride/sodium citrate (SSC) at about 55°C and 5% SDS, followed by a wash in 2.0 x SSC at about 55°C.
- 80. (NEW) An isolated nucleic acid molecule encoding a B7-1 or B7-2 protein which binds CD28 or CTLA4 comprising a contiguous nucleotide sequence which is an alternative splice form of a transcript of a B7-1 or B7-2 T cell costimulatory molecule gene having at least one first exon encoding a B7-1 or B7-2 first cytoplasmic domain comprising a nucleotide sequence selected from the group consisting of: a nucleotide sequence of SEQ ID NO: 25, SEQ ID NO: 27, SEQ ID NO: 29 and SEQ ID NO: 31, and at least one second exon encoding a B7-1 or B7-2 second cytoplasmic domain, wherein the isolated nucleic acid comprises a nucleotide sequence encoding the B7-1 or B7-2 second cytoplasmic domain which hybridizes to the complement of a nucleotide sequence of SEQ ID NO: 4 under conditions of 5.0 x sodium chloride/sodium citrate (SSC) at about 55°C and 5% SDS, followed by a wash in 2.0 x SSC at about 55°C.
- 81. (NEW) An isolated nucleic acid molecule which is a naturally occurring variant of the nucleotide sequence shown in SEQ ID NO: 18 or SEQ ID NO: 22 and encoding a B7-1 or B7-2 protein which binds CD28 or CTLA4 and which is an alternative splice form of a transcript of a B7-1 or B7-2 T cell costimulatory molecule gene having at least one first exon encoding a B7-1 or B7-2

